reporting and graphics.

Fees are based on individual services.

The client contact is Gregory J. di Pretoro.

The Citizens and Southern National Bank

33 North Ave. N.E., Atlanta, Ga. 30308; (404) 897-3083

Master trust assets	$1,043,000,000
Master custodial assets	$7,528,000,000
Master trust clients	39
Master custodial clients	6
Account supervisors	15

Citizens and Southern experienced a gain of $60 million in master trust assets from last year. Master custodial assets increased $1 billion.

The size of the smallest master trust client is $20 million; the largest is $100 million.

The primary accounting method is accrual, trade date. Asset valuations and transaction statements reflect pending transactions, and accrued interest and dividend income are reported on an accrual basis.

Basic master trust services include custody of assets; collection of any dividend or interest income; cash management; record maintenance; production of required statements; on-line access to trust accounting; periodic review of administrative matters and investments; personal contact with a certified employee benefit specialist; direction from authorized investment managers; and participant record keeping.

Optional services include international securities; options and futures; performance measurement; TUCS on-line; seminars; bulletins; legislative and regulatory affairs department; global custody; real estate services; multicurrency accounting; and on-line access to the trust accounting system.

Monthly transaction and asset reports are available within five business days after the end of a period; performance measurement reports are delivered within 10 days. All reports are available on-line.

New features include on-line order entry for investment managers; down load capability; ticker symbol entry; performance attribution; on-line access to several systems; and integration of multicurrency accounting.

Fees are based on market value of assets and individual services provided.

The client contact is Edgar R. Smith, vice president.

Continental Illinois National Bank & Trust Co.

231 S. LaSalle St., Chicago, Ill. 60697; (312) 828-2345

Master trust assets	$10,839,000,000
Master custodial assets	$2,114,000,000
Master trust clients	47
Master custodial clients	7
Account supervisors	17

Continental Illinois National Bank & Trust Co.'s master trust assets decreased $561 million from last year; master custodial assets decreased $314 million.

The size of the smallest master trust client is $8 million; the largest is $2.5 billion.

Trade date and settlement date accounting are available.

Basic master trust services include consolidated accounting (plan and managers); performance measurement; dial-up access via a remote information system; account relationship-manager; automated cash management; full global custodian network with multicurrency reporting capabilities; full fail float protection; electronic mail system; legal administrative guidance; benefit disbursing; participant record keeping; securities lending; ERISA reporting; customized reporting; option and futures processing and cash projections. An officer and administrative assistants are assigned to an account on a full-time basis.

Reports to clients are delivered five to 10 days after the end of the period. Transaction, asset and performance measurement reports are available on-line.

New features include downloading of client data.

Fees are primarily asset based with some transactional pricing.

The client contact is Christopher Ross, vice president.

f

First Pennsylvania Bank

15th and Chestnut Sts., Philadelphia, Pa. 19101; (215) 786-7946

Master trust assets	$3,000,000,000
Master custodial assets	$21,800,000,000
Master trust clients	15
Master custodial clients	14
Account supervisors	7

First Pennsylvania Bank's master trust assets increased $333 million from last year; master custodial assets were up $5 billion.

The size of the smallest master trust client is $1.5 million; the largest is $663 million.

The primary accounting method used is cash basis, but accrual basis accounting also is offered.

Basic master trust services include cash basis reporting; securities movement and control; income collection; and client terminal. Optional services include performance comparison; performance measurement; accrual accounting; participant record keeping; pension payroll; cash management; securities lending; global custody; portfolio analytics; and fail float.

Transaction and asset and liability reports are available five to seven business days after the end of a period. Performance measurement reports are delivered in 10 to 15 business days. All reports, as well as cash projection reports, are available on-line.

A new feature is global custody.

Fees are based on market value, security transaction volume, the number of accounts using specific services, accrual accounting, TUCS, performance measurement, pension payroll and participant record keeping. Securities lending is based on the percentage of net securities lending revenue.

The client contact is James F. McHale.

First Trust Co. Inc.

180 E. Fifth St., St. Paul, Minn. 55101; (612) 223-7422

Master trust assets	$3,000,000,000
Master custodial assets	$650,000,000
Master trust clients	17
Master custodial clients	7
Account supervisors	12

First Trust Co.'s master trust assets were up $800 million from last year; master custodial assets increased $150 million.

The size of the smallest master trust account is $16 million; the largest, $1.8 billion.

Trade date is the primary accounting method used; settlement date accounting also is offered.

Basic master trust services include securities settlement; custody and servicing; full accrual accounting; automated cash management; portfolio review; performance measurement; ERISA reporting; and benefit disbursement. Optional services include TUCS; securities lending; participant accounting; index fund; and customer on-line service.

Transaction reports are available the day after the month's end. Asset and liability reports are available in 10 business days and performance measurement reports in 15 business days. Reports available on-line include TUCS performance; asset reports with current market value; cash balances; pending transactions and transaction histories and benefit disbursing. On-line capability includes inquiry and data input.

By midyear, First Trust customers will be able to access an inquiry system using a fourth-generation language via remote log-on. The menu-driven system can be downloaded to a

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- Global Custody
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- Trust Universe Comparison Service®
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- Plan Sponsor On-line
- Client Seminars
- 401(k) Administration
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- Venture Capital Management
- PAYSOP Administration
- Legal Administration

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For more information, call Jane Fisher, VP, (919) 748-6348.

transaction.

The client contact is William D. Bensman, vice president.

First Wisconsin Trust Co.

777 E. Wisconsin Ave., P.O. Box 2054, Milwaukee, Wis. 53201; (414) 765-5000

Master trust assets	$1,871,000,000
Master custodial assets	$1,231,000,000
Master trust clients	30
Master custodial clients	3
Account supervisors	6

First Wisconsin Trust Co. increased its master trust assets $360 million from last year; master custodial assets were up $285 million. (The figures are as of Dec. 31.)

The size of the smallest master trust client is $3 million; the largest, $1.1 billion.

The primary accounting method is trade date with full accruals.

Master trust services include plan accounting, care and custody of assets, transaction processing, cash management, accounting statements and investment reviews. Optional services are on-line access, performance measurement, securities lending and benefit payments.

Transaction reports are available two to three business days after the end of the month. Asset reports are delivered within seven to nine business days, and performance measurement reports, within 10 to 12 business days. Transaction and asset reports are available on-line.

New features include indexed investment products and on-line access.

Fees are based on market value and individual services used.

The client contact is Mark A. Kimla.

g

Guaranty Trust Co. of Canada

335 Bay St., Toronto, Ontario M5H 3N8; (416) 863-4966

Master trust assets	$291,000,000(U.S.)
Master trust clients	25
Account supervisors	6

Guaranty Trust Co. of Canada's master trust assets increased $89 million from last year. All amounts are in U.S. dollars.

The size of the smallest master trust client is $787,000; the largest is $184 million.

The primary accounting method used is settlement date; trade date also is offered.

Basic master trust services include income accruals; unitized accounting and consolidated reporting; cash management; portfolio analysis; report customization; legal administrative guidance; benefit disbursing; participant record keeping; securities lending; and options and futures processing.

Optional services include performance measurement.

Monthly transaction and asset and liability reports are available 10 business days after the end of a period. Performance measurement reports are available in 30 working days and are available on-line.

Basic fees are based on book value, plus account charges and check charges. Fees for managed assets are based on average market value and average book value.

The client contact is Doug Wannamaker, vice president-pensions.

h

Harris Trust and Savings Bank

111 W. Monroe St., Chicago, Ill. 60603; (312) 461-7625

Master trust assets	$25,961,000,000
Master custodial assets	$6,264,000,000
Master trust clients	51
Master custodial clients	72
Account supervisors	8

Harris Trust and Savings Bank's master trust assets increased almost $6 billion from last year; master custodial assets were up about $3.1 billion.

The size of the smallest master trust client is $11.4 million; the largest is $7.84 billion.

Contractual settlement date is the primary accounting method used. Cash/settlement date and accrual/trade date also are offered.

Basic master trust services include investment manager relations; cash management; reporting and accounting; performance measurement; benefit disbursements; and global custody. Optional services include customized reporting; securities lending; defined contribution services; systematic equity management; portfolio analysis; and on-line computer access.

Transaction reports are available two to three business days after the end of the month. Asset and performance measurement reports are available three to seven business days after the end of a period. Reports available on-line include asset, transaction, short-term investment position, broker commission and market change.

New features include on-line performance data.

Fee calculations are based on market value and individual services.

The client contact is Walter J. Kowalczyk.

i

International Trust Co.

Royal Bank Plaza, North Tower, P.O. Box 75, Toronto, Ontario M5J 2J2; (416) 865-0515

Master trust assets	$1,933,000,000(U.S.)
Master trust clients	18
Account supervisors	4

International Trust Co.'s master trust assets increased $1.1 billion from last year. All figures are in U.S. dollars.

The size of the smallest master trust client is $2.1 million; the largest is $573 million.

Settlement date accounting is the primary method used. Trade date accounting also is offered.

Basic master trust services include trusteeship; custodian; collection of income; settled trades; asset valuation; and full plan accounting. Optional services include STIF; securities lending; participant record keeping; various pooled funds; and global services.

Transaction reports are available the first business day after the end of the month. Asset reports are available the sixth business day; performance measurement reports, the 10th day. All reports are available on-line.

New features include global and participant record keeping.

Fees vary according to client involvement.

The client contact is William Pascoe.

Irving Trust Co.

1 Wall St., New York, N.Y. 10015; (212) 635-1111

Master trust assets	$12,000,000,000
Master custodial assets	$31,000,000,000
Master trust clients	31
Master custodial clients	38
Account supervisors	18

Irving Trust Co.'s master trust assets increased $2 billion from last year; master custodial assets were up $6 billion.

The size of the smallest master trust client is $13.5 million; the largest, $4.5 billion.

Both trade date and settlement date accounting methods are offered.

Basic master trust services include transaction clearance; asset custody; custodized reporting; zero-balance cash management; fail float investment credit; and contractual settlement. Optional services include performance analytics and consulting; securities lending; global custody; spe-

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cialized STIF; passive bond fund; and on-line portfolio status.

All reports are available five days after the end of a period. All are available on-line.

New features include enhanced performance analytics reports and additional on-line reports.

Fees are based on transaction volume and market value.

The client contact is Gary L. Davenport, vice president.

m

Manufacturers Hanover Trust

530 Fifth Ave., New York, N.Y. 10036; (212) 819-1580

Master trust assets	$18,780,000,000
Master custodial assets	$7,980,000,000
Master trust clients	65
Master custodial clients	23
Account supervisors	16

Manufacturers Hanover Trust's master trust assets increased $2.78 billion from last year; master custodial assets were up $4.28 billion.

The size of the smallest master trust account is $5 million; the largest, $5.2 billion.

The primary accounting methods used are trade date and settlement date. Full accrual also is offered.

Basic master trust services include on-line access; administration; legal administrative guidance; master consolidation reporting; zero-balance cash management; benefit disbursing; participant record keeping; securities lending; global custody; performance measurement; investment manager consulting; portfolio analysis/comparison; customized reporting; fail float; options and futures processing; and ERISA reporting. Optional services are benefit payments and performance measurement.

Monthly transaction reports are available three days after the end of the period. Asset and liability reports are available within five days, and performance measurement reports are available one to two days after the asset reports. All reports are available on-line.

New features include a personal computer-based system for accessing the main frame computer and other outside data bases and enhancements to securities schedules, transaction reports, cycle processing, multicurrency accounting, trade date, expanded schedules, microfiche and personal computer compatibility.

Fees are based on a combination of asset values and individual services.

The client contact is Renee San Marco, vice president.

Manufacturers National Bank of Detroit

100 Renaissance Center, Sixth Floor, Detroit, Mich. 48243; (313) 222-4470

Master trust assets	$11,400,000,000
Master custodial assets	$2,400,000,000
Master trust clients	27
Master custodial clients	16
Account supervisors	4

Manufacturers National Bank of Detroit experienced an increase of $2.7 billion in master trust assets from last year. Master custodial assets were up $350 million.

The size of the smallest master trust account is $7.5 million; the largest is $10.6 billion.

The primary accounting method used is settlement date with trade date accruals.

Basic master trust services offered include unitized accounting; cash management; consolidated reporting; and performance measurement reporting. Optional services include securities lending and on-line computer terminals at the customers' locations.

Transaction and asset reports are available five business days after the end of a period. Performance measurement reports are available 15 business days from the end of each month for standard reports and 45 business days from the end of the quarter for TUCS reports. All reports are available on-line.

New features include global custody and portfolio analysis.

Fees are based on the number of investment managers, market value, the number of issues held and activity.

The client contact is Andrea E. Zeme.

Marine Midland Bank

250 Park Ave., New York, N.Y. 10177; (212) 503-2724

Master trust assets	$1,200,000,000
Master custodial assets	$300,000,000
Master trust clients	26
Master custodial clients	40
Account supervisors	8

Marine Midland Bank's master trust assets were up $250 million from last year; master custodial assets increased $50 million.

The size of the smallest master trust client is $1 million; the largest, $600 million.

Accrual is the primary accounting method used. Other methods offered include cash, modified cash and tax lot.

Basic master trust services include trusteeship; safekeeping; income collection; effecting corporate actions; accounting reports; cash management; and ERISA and FASB reports. Optional services include participant record keeping; benefit payments; performance measurement; investment management; and securities lending.

Transaction and asset reports are available five days after the end of a period. Performance measurement reports are available in 15 days. Pending trades, cash management information and asset lists are available on-line.

New features include the on-line inquiry system, "Trust Aid."

Fees are based on a combination of market value and complexity.

The client contact is Moira L. Patterson, assistant vice president.

Marshall & Ilsley Trust Co.

770 N. Water St., Milwaukee, Wis. 53202; (414) 765-8187

Master trust assets	$1,700,000,000
Master custodial assets	$1,800,000,000
Master trust clients	23
Master custodial clients	4
Account supervisors	9

Marshall & Ilsley Trust Co. experienced an increase in master trust assets of $500 million from last year. Master custodial assets increased $1.2 billion.

The size of the smallest master trust client is $3 million; the largest, $1.1 billion.

Accrual is the primary accounting method used.

Basic master trust services include performance measurement; participant record keeping; ERISA disclosure; benefit disbursement; and investment management. Optional services are reviewed with individual clients.

All reports are available to clients five to seven business days after the end of a period. All reports should be on-line by year end.

Fees are based on a combination of asset value and individual service.

The client contact is Morry L. Birnbaum.

Mellon Bank

1 Mellon Bank Center, Pittsburgh, Pa. 15258; (412) 234-5000

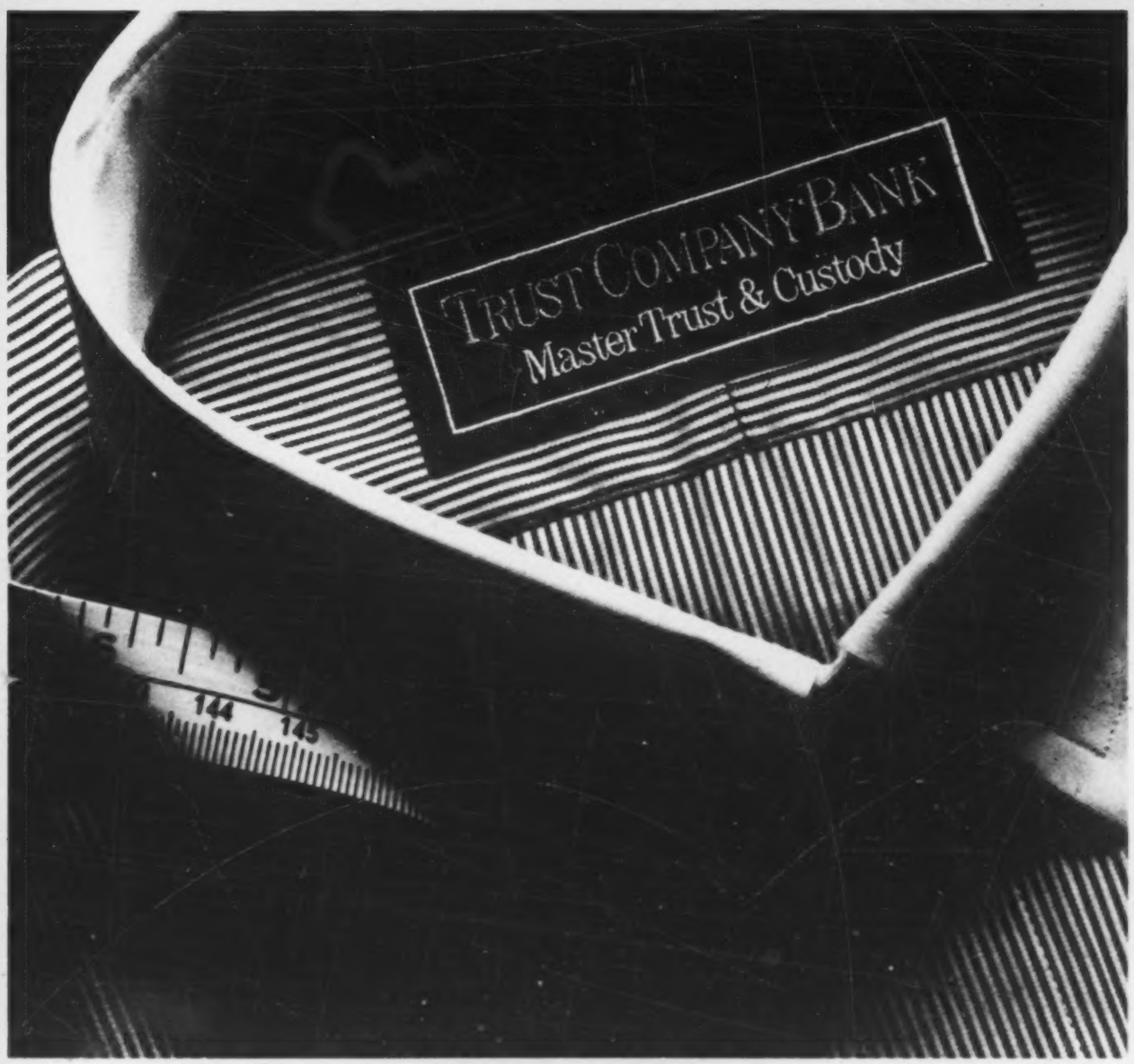
Master trust assets	$51,800,000,000
Master custodial assets	$5,700,000,000
Master trust clients	78
Master custodial clients	7
Account supervisors	8

Mellon Bank's master trust assets increased $7.8 billion from last year. Master custodial assets increased $5.1 billion.

The size of the smallest master trust client is $2 million; the largest, $8.5 billion.

The primary accounting method used is trade date, fully accrued. Cash accounting also is offered.

Basic master trust services include automated cash sweep; conversion; administration; cash management;



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accounting; and reporting. Optional services are securities lending; global custody; participant record keeping; pension disbursement; performance measurement; options and futures; and on-line service.

Transaction reports are available three business days after the end of the month. Asset reports are available three to five business days after the end of the period and performance measurement reports are available three to five weeks after the end of the period. 3-R's reports are available five business days after month's end. All reports are available on-line.

New features include report writing, on-line performance and analytics.

Fees are based on a combination of asset value, individual services and account activity.

The client contact is Gary A. Rothman.

Mercantile-Safe Deposit & Trust Co.

2 Hopkins Plaza, P.O. Box 2257, Baltimore, Md. 21203; (301) 237-5551

Master trust assets	$2,200,000,000
Master custodial assets	$1,900,000,000
Master trust clients	17
Master custodial clients	3
Account supervisors	5

Mercantile-Safe Deposit & Trust Co.'s master trust assets increased $400 million from last year; master custodial assets were up $300 million.

The size of the smallest master trust client is $2 million; the largest is $800 million.

Settlement date is the primary accounting method.

Basic master trust services include depository participation; benefit payments; option transactions; securities lending; cash management; investment analysis; investment performance measurement; ERISA reporting and brokerage reporting.

Hard-copy reports are delivered to clients in five to 10 business days.

New features include participant record keeping.

Fees are based on asset value and income collected.

The client contact is H. Louis French, vice president.

Montreal Trust

15 King St. W., Toronto, Ontario M5H 1B4; (416) 860-5848

Master trust assets	$3,722,000,000(U.S.)
Master trust clients	77
Account supervisors	10

Montreal Trust's master trust assets increased $1.43 billion from last year. All figures are in U.S. dollars.

The size of the smallest master trust client is $222,000; the largest is $608 million.

Settlement date is the primary accounting method used.

Basic master trust services include corporate trusteeship for consolidated pension fund; consolidated accounting; government reporting; automatic crediting and allocation of dividends, interest and capital gains; trust documentation; portfolio analysis and performance measurement; benefit payment services; securities lending; global custody; options processing; and on-line and microcomputer reporting.

Monthly transaction reports and asset and liability reports are available 10 business days after the end of a period. Performance measurement reports are available in 15 days. Basic accounting and portfolio data are available on-line.

New features include a short-term investment fund and an equity index fund.

Fees are based on average book value.

The client contact is Ken Neely, assistant vice president-corporate client services.

n

National Bank of Detroit

611 Woodward, Fifth Floor, Detroit, Mich. 48226; (313) 225-3900

Master trust assets	$11,800,000,000
Master custodial assets	$9,900,000,000
Master trust clients	67
Master custodial clients	27
Account supervisors	13

National Bank of Detroit's master trust assets increased $2.25 billion from last year; master custodial assets were up $1.15 billion.

The size of the smallest master trust account is $5.5 million.

Trade date and accrual are the primary accounting methods used. Clients also can review assets on a trade or settlement date basis.

Basic master trust services include guaranteed safekeeping; consolidated reporting; ERISA disclosure; STIF; and options and futures processing. Optional services include index funds; cash management; benefit disbursements; performance measurement; portfolio analytics; securities lending; global custody; on-line access to dedicated terminal or personal computer; and participant record keeping.

Monthly transaction reports and asset and liability reports are available five to seven business days after the end of a period. Performance measurement reports are available in 20 business days. All are available on-line.

New features include downloading of portfolio information to plan sponsor's personal computer.

Fees are based on asset market value and individual services.

The client contact is Clarence E. Kufel, vice president.

The National Trust Co.

21 King St. E., Toronto, Ontario M5C 1B3; (416) 361-3611

Master trust assets	$5,011,000,000(U.S.)
Master trust clients	95
Account supervisors	8

The National Trust Co.'s master trust assets increased $716 million from last year. All figures are in U.S. dollars.

The size of the smallest master trust client is $859,000; the largest is $1.9 billion.

Cash is the primary accounting method used. Accrual also is offered.

Basic master trust services include performance measurement; portfolio analysis and review; participant record keeping; securities lending; and benefit disbursements. Optional services include pooled and segregated investments.

Monthly transaction reports and asset and liability reports are available 10 days after the end of a period.

Performance measurement reports are available in 15 days. Monthly transaction reports and asset reports are available on-line.

New features include commission by broker; revised book value; and block trades.

Fees are based on book value and extra services.

The client contact is Michael How.

Northern Trust Co.

50 S. LaSalle St., Chicago, Ill. 60675; (312) 630-6000

Master trust assets	$57,091,000,000
Master custodial assets	$34,991,000,000
Master trust clients	148
Master custodial clients	49
Account supervisors	27

Northern Trust Co.'s master trust assets increased $10.1 billion from last year and master custodial assets, $19 billion.

The size of the smallest master trust client is $9.3 million; the largest, $5.1 billion.

The primary accounting methods used are settlement date and full accrual. Trade date reporting also is available.

Basic master trust services include custody; ERISA reporting; automated cash management; fail float analysis and credit; and tax lot accounting for endowments and foundations. Optional services include consulting services; equity and fixed-income index funds; dedicated and immunized bond funds; global custody; electronic delivery system; performance measurement; securities lending; benefit

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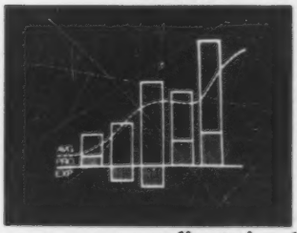

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disbursements; real estate sale-leasebacks; active asset management; options and futures accounting; plan accounting; and participant record keeping.

Transaction reports are available three business days after the end of the month; asset reports, five business days after the end of the period; and performance measurement reports, 19 to 25 business days. All accounting and performance analysis information is available on-line.

New features include electronic performance analysis service; portfolio insurance; dynamic risk management; S&P 500 futures arbitrage; South Africa-free equity fund; EAFE index fund; and transaction execution analysis reports.

Fees are based primarily on market value of assets.

The client contact is Thomas W. Kimen Jr.

Norwest Bank Minneapolis

8th and Marquette, Minneapolis, Minn. 55479; (612) 372-8017

Master trust assets	$2,000,000,000
Master custodial assets	$600,000,000
Master trust clients	22
Master custodial clients	3
Account supervisors	5

Norwest Bank Minneapolis' master trust assets were up $500 million from last year; master custodial assets increased $100 million.

The size of the smallest master trust client is $2 million; the largest, $550 million.

Dollar-base accounting is the primary method used. Unit base also is offered.

Basic master trust services include cash management; plan accounting; basic performance measurement; basic accounting reports; and consolidations. Optional services include performance measurement; TUCS; asset allocation; asset management; specialized accounting reports; and on-line access.

Monthly transaction reports and asset and liability reports are available 10 business days after the end of a period. Performance measurement reports are available in 15 business days. Transaction and asset reports are available on-line.

Fees are calculated on a combination of assets, transactions and specific charges.

The client contact is John Hale.

R

RepublicBank Dallas-Houston

P.O. Box 241, Dallas, Texas 75221; (214) 922-6506; P.O. Box 299, Houston, Texas (713) 243-6263

Master trust assets	$17,900,000,000
Master custodial assets	$10,000,000,000
Master trust clients	209
Master custodial clients	29
Account supervisors	14

RepublicBank's master trust assets increased $2.9 billion from last year; master custodial assets were up $3.15 billion.

The size of the smallest master trust client is $3 million; the largest is $5 billion.

Trade date full accrual is the primary accounting method used. Settlement date, cash or accrual basis accounting also are offered.

Basic master trust services include client on-line reporting; downloading and formatting capabilities; more than 150 accounting reports; global custody with multicurrency accounting; plan accounting; fail float earnings; pre-crediting dividends and interest on payable date in good funds; daily pricing; benefit payments; withholding and control disbursement; on-line performance measurement and analytics; and on-line DTC/ID securities processing.

Optional services include securities lending; 401(k) and ESOP record keeping with on-line inquiry; government reporting; stock and bond index funds; portfolio risk insurance; GIC wholesale service; dedicated bond portfolio; performance consulting; TUCS; transition manager service; futures and options; and international, real estate and energy investing.

Transaction reports are available two business days after the end of the month. Asset reports are available three to five business days after the end of a period and performance measurement reports, 20 days. All are available on-line with download capabilities.

New features include enhanced client on-line reports; on-line record keeping; risk portfolio protection, daily pricing; and futures.

Fees are based on a percentage of market value and transaction charges.

The client contact is David J. Pittman, senior vice president and director-trust corporate service marketing.

Royal Trust Corp. of Canada

P.O. Box 7500, Station A, Toronto, Ontario M5W 1P9; (416) 867-2021

Master trust assets	$12,016,000,000(U.S.)
Master trust clients	94
Account supervisors	13

Royal Trust Corp. of Canada's master trust assets rose $3.9 billion from last year. All figures are in U.S. dollars.

The size of the smallest master trust client is $71,580; the largest is $1.16 billion.

Settlement date is the primary accounting method used. Trade date reporting also is offered.

Basic master trust services include safekeeping of assets; check OREFT payment; corporate change and compliance monitoring; and basic performance measurement. Optional services include on-line inquiry; on-line data entry; securities lending; downloading; global custody; advanced performance measurement; and employee benefit record keeping.

Transaction reports are available five business days after the end of the month. Asset and performance measurement reports are available 10 business days after the end of a period. Transaction and asset reports are available on-line.

New features include downloading of reports.

Fees are based on book value of assets, security transactions and special features.

The client contact is M.F. Blakely.

S

State Street Bank & Trust

P.O. Box 1713, Boston, Mass. 02105; (617) 786-6353

Master trust assets	$44,839,000,000
Master custodial assets	$65,437,000,000
Master trust clients	104
Master custodial clients	72
Account supervisors	47

State Street Bank & Trust Co.'s master trust assets increased $6.82 billion from last year; master custodial assets grew $32.39 billion.

The size of the smallest master tru client is $3 million; the largest is $13 billion.

Accounting and record keeping a provided on a true trade date, fu accrual basis.

Basic master trust services inclu safekeeping of assets; cash manag ment through several short-ter investment vehicles; settlement ar control of all portfolio trades; corpora action monitoring; determination ar collection of income; cash availabili reporting; accounting for option futures and real estate; interactive ge eral ledger accounting; DTC and FE participation; on-line institutional de very system; daily, weekly or month valuation of assets; fiduciary contr plan accounting; 401(k) capabilitie benefit payments and participant re ord keeping; securities lending; and global custody network with multicu rency accounting.

Optional services are performanc measurement and analytics; on-li client services; benefit payments ar global custody.

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Monthly transaction reports and asset and liability reports are available three to seven business days after the end of the period; performance measurement reports, eight to 10 business days.

Accounting, performance and analytics are available on-line.

Fees are based on net asset value, portfolio structure and trading volumes.

The client contacts are Mike Herlihy, vice president for corporate, union, endowment and foundation plans, and J.D. Nelson, vice president for public funds.

t

Trust Co. Bank

P.O. Box 4655, Atlanta, Ga. 30302; (404) 588-8097, master trust; (404) 588-7319, master custody

Master trust assets	$450,000,000
Master custodial assets	$700,000,000
Master trust clients	17
Master custodial clients	2
Account supervisors	6

Trust Co. Bank's master trust assets increased $75 million from last year; master custodial assets increased $100 million.

The size of the smallest master trust client is $5 million; the largest is $100 million.

The primary accounting methods used are contract and trade date.

Basic master trust services include safekeeping securities; trade settlement; securities lending; global custody; automated cash management; options and futures processing; performance measurement; ERISA reporting; trade date accounting; and processing benefit payments. Optional services include on-line inquiry; downloading portfolios; special reporting; and cash management consulting.

Transaction reports are available 10 to 15 business days after the end of the month. Asset and liability reports are available three days after the end of a period and performance measurement reports, 20 days. Asset reports are available on-line.

New features include securities lending, enhanced options processing and supplemental financial futures statements.

Fees are calculated on an individual basis, depending on services required.

The master trust client contact is James E. Arnett, group vice president. The master custody client contact is Paul L. Robertson III, assistant vice president.

u

U.S. Trust Co. of New York

45 Wall St., New York, N.Y. 10005; (212) 806-3834

Master trust assets	$11,000,000,000
Master custodial assets	$6,000,000,000
Master trust clients	75
Master custodial clients	91
Account supervisors	14

U.S. Trust Co. of New York's master trust assets increased $1.2 billion from last year; master custodial assets were up $1.5 billion.

The size of the smallest master trust client is $25 million; the largest is $2.5 billion.

Actual settlement date is the primary accounting method used. Trade date, contractual settlement or actual settlement date and pending addendum also are available.

Basic master trust services include trade processing; safekeeping; collection of dividends and interest; weekly and cumulative monthly statements; monthly valuations; and quarterly allocations and accountings.

Optional services include performance measurement; investment diagnostics; passive investment vehicle design; return optimizers; on-line cash management; customer accounting and valuations; off-site flexib report generation; global custody; be efit payments; amortization and accr tion schedules; customized reportin and securities lending. For sleepmasy aries, optional services also include ta accounting; collateralization for deb instruments; gift processing; feder and state regulatory reporting; ta preparation and donor record keeping

Monthly transaction reports are ava lable two business days after the en of the period. Asset and liability repor and performance measureme reports are available in seven to 1 business days, depending on requir ments.

Reports available on-line includ accountings; valuations; transactio and performance measurement.

New features include on-line perfo mance data and accounting, and flex ble report generator.

Fees are calculated on the numb of accounts, administration, asset siz and transactions.

Client contact is Robert Pagan vice president.

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W

Wachovia Bank and Trust

P.O. Box 3099, Winston-Salem, N.C. 27150; (919) 770-6348

Master trust assets	$20,400,000,0
Master custodial assets	$1,100,000,0
Master trust clients	
Master custodial clients	
Account supervisors	

Wachovia Bank and Trust Co. master trust assets increased $7. billion from last year; master custodi assets were up $522 million.

The size of the smallest master tru client is $8.3 million; the largest $6.7 billion.

Full accrual trade date adjuste accounting is the primary metho used. Cash accounting also is offered

Basic master trust services includ custody of assets; benefit payment ERISA reporting; cash managemen fail float analysis; monthly reportin plan accounting; on-line inquiry; an legal administrative guidance.

Optional services include securitie lending; global custody asset alloc tion; options and futures processin participant record keeping; perfo mance measurement; portfolio anal sis and comparative performance; an customized reporting.

Transaction reports are availabl three business days after the end the month. Asset reports are availabl 10 business days after the end of period and performance measureme reports, 12 business days. All a available on-line.

New features include client newsle ter; fixed principal (GIC) managemen enhanced on-line reporting; perfo mance consulting; on-line pensio payment system; and a short-ter investment fund accounting system.

Fees are based on a combination market value and specific service provided.

The client contact is Jane B. Fisher

Wilmington Trust Co.

Rodney Square North, Wilmington, Del. 19890; (302) 651-1723

Master trust assets	$10,978,000,0
Master trust clients	
Account supervisors	

Wilmington Trust Co.'s master tru assets increased $3.2 billion from la year.

The size of the smallest master tru client is $32 million; the largest, $10.1 billion.

The primary accounting method trade date, fully accrued. Contractu settlement date accounting also offered.

Basic master trust services includ custodial; cash management; maste trust reporting; on-line access; an options and futures processing Optional services include securitie lending; global custody; participan

Trust use . . .

Continued from page 23

large account, the more than $5 billion Howard Hughes Medical Institute, Bethesda, Md.

(*P&I Age* defines a master trust bank as one having trustee responsibilities for multiple plans with multiple managers, or a single plan with multiple managers. The master trust bank provides unitized reporting and accounting and other services, such as performance measurement. Master trust is used mostly for corporate employee benefit plans.

(The master custodian provides all of the services of a master trustee without legal trusteeship as, for example, in public employee plans or some endowments and foundations where legal trusteeship must remain within the institution.)

Among Canadian master trust banks, Royal Trust Corp. of Canada, Toronto, had 36% of the market share, with $8.6 billion in total master trust and master custodial assets. National Trust Co., Toronto, had 21%, with $5 billion. Montreal Trust, Toronto, retained its 16% market share, with $3.7 billion.

Canada Trust Co., which merged in December with Canada Permanent Trust Co., Toronto, had 15%, with $3.6 billion.

International Trust Co., Toronto, held an 8% market share, with $1.9 billion.

Guaranty Trust Co. of Canada, Toronto, retained is 4% market share, with $891 million.

All figures for Canadian master trust banks are reported in U.S. dollars. Market share comparisons for the Canadian banks could not be computed, because some of the figures used last year were reported in Canadian dollars.

P&I Age also surveyed pension fund executives about various aspects of their master trustee relationships. Of the 130 responding, the overwhelming majority pay master trust fees from plan assets. Only 31 use corporate dollars, while four use both pension and corporate assets.

This is in keeping with the growing tendency of pension funds to use plan assets to pay investment management fees (*P&I Age*, July 8). Corporate officers generally favor paying costs incurred in servicing the plan from the plan itself.

However, while fees for investment management — and brokerage — have come under pressure, there does not appear to be such pressure on master trust fees. Pension executives interviewed said they have negotiated satisfactory fees.

"When we first signed up with our master trustee, we negotiated what I think was a reasonable fee," said an official of Southwest Gas Corp., Las Vegas, Nev. First Interstate Bank of Arizona, Phoenix, is master trustee for the $40 million fund.

"We address the fees with Bankers Trust very carefully," said E.C. Ecker, pension investment officer for the $1 billion American Can Co. fund, Greenwich, Conn. "We have reviewed it periodically, and compared it to other master trustees, and we're quite satisfied."

"We felt we got a very competitive fee structure," said Joseph Jaeger, senior vice president-finance with California & Hawaiian Sugar Co., San Francisco, which hired Mellon Bank as master trustee for its $70 million fund last year. "We haven't tried to reduce it."

Few pension funds are using soft dollars to pay for master trust services, although the Department of Labor has opened this option to them. Of the 130 survey respondents, just 11 are using soft dollars. A few more, however, are considering it.

"We have sort of explored it, but we haven't really looked at it thoroughly," said Bill Conyer, director of finance administration at Illinois Power Co., Decatur, Ill., which has $200 million in pension assets. "We're interested, but I don't think there's anything imminent." Northern Trust is Illinois Power's master trustee.

Southwest Gas probably will look at soft-dollar arrangements for master trust, but the pension staff has reservations. "We don't like to restrict our investment managers to so many directed trades," the Southwest Gas official said. The fund now directs about half of its trades, and this generates enough soft dollars to pay its performance measurement consultant, SEI Funds Evaluation Services, Wayne, Pa., he said.

Polaroid Corp., Cambridge, Mass., occasionally pays master trust fees to U.S. Trust Co. of New York with soft dollars generated by its investment management subsidiary, Merganser Capital Management Corp., said Edward M. Safran, assistant treasurer.

"When our accounts generate soft dollars, it's our money, and we use it to reduce Polaroid's expenses," he said. "We don't see any advantage in creating more soft dollars, but the ones that we have, we use."

Another trend among pension funds is increasing use of global custody services, as more funds invest overseas. Securities must be safekept in the country in which they are traded.

About half of Northern Trust's 42 global custody clients have hired the firm in the past two years, said Jennifer Kamp Cameron, vice president. International investment, and therefore global custody, are expected to continue increasing, she said.

At the end of 1985, funds covered by the Employee Retirement Income Security Act had $27 billion invested outside the United States; a 40% growth rate is predicted over the next three years, Ms. Cameron said. Also, many public funds are looking at international investing, she said.

Robert Kay, a vice president at Chase Manhattan, agreed the demand for global custody is growing. "Those funds that have already placed funds overseas appear to be placing increasing amounts of dollars overseas," he said.

But this doesn't mean more banks are likely to enter the global custody marketplace, Mr. Kay said.

Just as with domestic master trust, clients are demanding increasingly sophisticated services, and the number of institutions able to provide these is small, he said.

"With the nature of the business and the demands for its complexity of service, I think we would see more people dropping out of the business rather than coming in," he said. ■

record keeping; pension disbursement; and investment and analytic services.

Transaction reports are available one business day after the end of the month. Asset reports are available in two business days after the end of the period and performance measurement reports, 12 days. Transaction and asset reports are available on-line.

New features are mutual funds; on-line access; an international fund; and TUCS.

Fees are based on asset value and specific services provided.

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Money managers . . .

Overall rating of master trust banks by investment managers

Rank	Bank	Rating	No. of responses*
1.	Harris Trust and Savings	4.4	18
2.	Citizens and Southern	4.3	6
3.	Marshall & Ilsley Trust Co.	4.3	3
4.	Wilmington Trust Co.	4.1	7
5.	Bank of New York	4.1	17
6.	AmeriTrust Co.	4.0	10
7.	Boston Safe Deposit and Trust	4.0	20
8.	Centerre Trust Co.	4.0	8
9.	Manufacturers National, Detroit	4.0	5
10.	Citibank	3.9	27
11.	RepublicBank	3.8	14
12.	National Bank of Detroit	3.8	10
13.	Mercantile-Safe Deposit	3.8	6
14.	State Street Bank & Trust Co.	3.8	32
15.	First Pennsylvania Bank	3.7	6
16.	Norwest Bank, Minneapolis	3.7	6
17.	Mellon Bank	3.7	23
18.	Wachovia Bank and Trust Co.	3.7	20
19.	Marine Midland Bank	3.6	9
20.	Northern Trust Co.	3.6	29
21.	Irving Trust Co.	3.6	20
22.	Texas Commerce Bank	3.6	11
23.	U.S. Trust Co. of New York	3.5	16
24.	Manufacturers Hanover Trust	3.5	22
25.	Bankers Trust	3.5	26
26.	Chase Manhattan Bank	3.4	32
27.	First Trust Co., St. Paul	3.3	3
28.	Bank of America	3.2	14
29.	Continental Illinois	2.9	10
30.	First City National Bank	2.8	5

* does not include banks with fewer than three respondents

Source: *Pensions & Investment Age*

Continued from page 23

The top five master trust banks in each category — those receiving ratings of 4 or higher by three or more managers — are, in descending order as follows:

Security clearance: M&I, Citizens & Southern, Wilmington Trust and Harris Trust. AmeriTrust and Citibank, New York, tied for fifth place. M&I and Bank of Oklahoma rated by one manager, received perfect scores in this category. No bank scored below average.

Keeping managers up-to-date on cash and transaction activity: M&I, Harris Trust, Citibank, Wilmington Trust and Mellon Bank, Pittsburgh. Again, Bank of Oklahoma received a 5. All banks received ratings of 3 or higher in this category.

Automatically investing cash balances: M&I, Centerre Trust, Harris Trust, Manufacturers National Bank of Detroit and National Bank of Detroit.

Bank of Oklahoma again received a 5 in this category. All banks rated 3 or more here.

Prompt crediting of cash (principal and income): M&I (another 5), Harris Trust, AmeriTrust, Citizens & Southern and Norwest Bank Minneapolis.

Reporting accuracy: M&I, Manufacturers Detroit, Centerre, AmeriTrust and Wilmington Trust. Bank of Oklahoma again scored 5. First City National was rated 2.4 by five managers.

Capabilities of account representative: Harris Trust, Bank of New York, Citizens & Southern, AmeriTrust and Wilmington Trust.

Cooperativeness of the institution: Harris Trust, Wilmington Trust, Manufacturers Detroit and Citizens & Southern. AmeriTrust and Bank of New York tied for fifth place. Bank of Oklahoma scored 5.

The banks and the number of money managers that rated them are: Chase Manhattan Bank, New York, and State Street Bank & Trust Co., Boston, rated by 32 managers each; The Northern Trust Co., Chicago, 29 managers; Citibank, 27; Bankers Trust Co., New York, 26; Mellon Bank, 23; Manufacturers Hanover Trust, New York, 22; Boston Safe, Wachovia Bank & Trust Co., Winston-Salem, N.C., and Irving Trust Co., New York, 20 each; Harris Trust, 18; Bank of New York, 17; United States Trust Co. of New York, 16; Bank of America, San Francisco, and RepublicBank Dallas, 14 each; Texas Commerce Bank, Houston, 11; AmeriTrust, National Bank of Detroit and Continental Illinois, 10; Marine Midland, New York, nine; Centerre, eight; Wilmington Trust, seven; Citizens & Southern, Mercantile-Safe Deposit & Trust Co., Baltimore, First Pennsylvania Bank, Philadelphia, and Norwest Bank Minneapolis, six; First City National and Manufacturers Detroit, five; M&I and First Trust Co. of St. Paul, three; First Wisconsin, two; and Bank of Oklahoma and Rainier National Bank, one. Managers were asked to rate any and all master trust banks with which they had dealt. ■

Services receive high . . .

Continued from page 23

Provident National Bank, Cincinnati; Maryland National Bank, Baltimore.

Manufacturers National Bank of Detroit; Centerre Trust Co., St. Louis; and Bank IV Wichita (Kan.) fell below average in overall performance, with respective ratings of 2.3, 2.2 and 2.

Master trust banks also were rated in five categories of master trust services — personnel, cash management, performance measurement, reporting and other services (such as securities lending, consulting and on-line systems).

Most banks were rated 3 or higher in personnel, indicating general satisfaction with the bank's knowledge of financial markets, familiarity with client's needs, knowledge of bank operations, ability to get things done and turnover of personnel.

The top five banks in this category are Mellon, First Trust of St. Paul, Bank of New York, Boston Safe Deposit and Harris Trust.

First Alabama, rated by one respondent, received a perfect 5 in the personnel category.

Most banks also received high marks in the cash management category, where corporate pension executives rated the institutions according to fail balance earnings credit, speed in crediting cash, trustee's cash balance policy and trustee's investment of cash.

The top five banks in the cash management category are Boston Safe, Harris Trust, National Bank of Detroit, Mellon Bank and Northern Trust.

Connecticut National Bank and Norwest Bank Minneapolis, each rated by one respondent, received perfect scores in the cash management category. Bank IV Wichita, also rated by one executive, fell below average.

In the performance measurement category, First Trust, Boston Safe, National Bank of Detroit, Harris Trust and Northern Trust were the top rated. First Trust received a 5.

The banks were rated on format, flexibility, clarity, comprehensiveness, length of historical record and overall expertise. All but three banks were rated 3 or higher in this category. The three are Manufacturers Hanover, rated by three respondents, and Centerre Trust and Bank IV Wichita, both rated by one respondent.

In the reporting category, banks were rated according to report timing, consistency in meeting reporting deadlines, quality of reports, promptness at correcting errors, flexibility of reports, Employee Retirement Income Security Act reporting and ability to meet client's needs.

In the reporting category, Boston Safe, National Bank of Detroit, Harris Trust and Mellon Bank are the top four, with Bank of America, RepublicBank Dallas and Wachovia tied for fifth place.

Again, all but two banks — Bank IV Wichita and Centerre Trust — were rated above average.

In the other services category, every bank that offers a securities lending program received a high rating from clients. No bank was rated lower than 3, and most were rated between 4 and 5. The top rated here are Harris Trust, Boston Safe, Mellon Bank, Wachovia and Northern Trust.

The same was true in the consulting services category, where almost every bank that offers the service was rated highly. The top rated here are First Trust of St. Paul and RepublicBank Dallas, each with a rating of 5. Other banks highly regarded for consulting services include Bankers Trust, Boston Safe, Mellon Bank and Northern Trust.

Master trust banks with computer accessibility also appear to fare well in the eyes of clients. In this category, most banks once again rated above average.

Bank of New York, Boston Safe, Mellon Bank, Harris Trust and National Bank of Detroit were the top rated in systems capabilities, service orientation, on-line capabilities and commitment.

Rated below average in this category were Manufacturers National Bank of Detroit, Bank IV Wichita and Centerre Trust.

Corporate pension executives also were asked to characterize their trustee's fees as low, average or high. Of 130 respondents, five described their trustee's fees as low, four said they were high, and the remaining 121 characterized their trustee's fees as average. ■

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Canadian master trust banks (U.S. $ millions)

Rank	Bank	Master trust assets
1.	Royal Trust Corp. of Canada	$8,601
2.	National Trust Co.	5,011
3.	Montreal Trust	3,722
4.	Canada Trust Co.	3,579
5.	International Trust Co.	1,933
6.	Guaranty Trust Co. of Canada	891
	TOTAL	$23,737

Cash Management

Corporate cash is kept in internal staff hands

By Barry B. Burr

Corporations rarely hire money management firms to run any of their short-term investments, despite having hundreds of millions of dollars to invest.

An informal survey of major corporations showed they rely on only two or three staff people, on average, in the treasury department to handle the investments of working cash. In many cases, the corporate portfolio managers have other, non-investment duties as well.

Only in the area of so-called alternative investments, such as dividend capture strategies, do corporate treasury executives hire outside managers. But few companies surveyed employ such strategies. A number of executives, however, said they are considering devoting a small percentage of their cash to such investments and hiring outside managers.

The limited use of outside managers for corporate short-term investments contrasts with the nearly universal use of many managers to run corporate pension fund investments.

In explaining the discrepancy, treasury executives cite differences in corporate objectives that lead to different investment strategies. In addition, they said corporations need to keep the investment reporting timely and portfolio liquid. Also, some executives said their internal staff outperformed short-term investment funds.

Sun Co., Radnor, Pa., unlike most corporations surveyed, employs two outside managers to invest the company's working cash, according to William J. Latta, assistant treasurer.

But the bulk of Sun's more than $2 billion in corporate cash is invested by an internal portfolio staff of three, one of whom has other duties as well.

"We are very familiar with the cash markets," Mr. Latta said.

"We've been investing in the cash markets for a number of years. We have a staff that can do a good job compared to the rest of the money market (managers).

"I don't see where a money manager would be able to provide any value added on short-term basis . . . except on special strategies like dividend capture."

Eastman Kodak Co., Rochester, N.Y., employs one outside firm as well, assigning it an undisclosed amount in a dividend capture strategy. But most of Kodak's cash is managed internally, according to Charles Smith, manager of new services. Kodak has four staff portfolio managers to run its nearly $900 million.

At Chevron Corp., San Francisco, Malcolm J. "Mac" McAuley, deputy treasurer-banking and cash management, said the firm is considering hiring an outside special strategy manager.

"We have a study under way," he said.

Chevron has two executives in New York running the $1 billion it has domestically. He said he would view an outside manager as an "additional source of input, intelligence and commentary."

But he doubts outside managers would ever play anything but a marginal role.

Chevron's in-house short-term investing "is very much integrated in our operations," Mr. McAuley said. "We have such tremendous flows of cash; an outside manager could not be assured of having that money tomorrow."

At American Telephone & Telegraph Co., New York, John G. McNelis, portfolio manager, said the corporation has two portfolio managers who spend all their time investing. Plus, it has a crew of five in the back office taking care of investment reporting and confirmation.

Continued on page 46

Comparison of corporate cash and pension fund investment management

Company	Corporate cash ($ mils.)	Staff corp. cash managers	Outside corp. cash managers	Pension[1] fund ($ mils.)	Outside pension fund managers[2]
Ford Motor	4,000	3	0	9,500	24
AT&T	2,200	2	0	21,035	53
Chrysler	3,200	3[3]	0	2,346	10
Sun	2,000	3[4]	2	1,205	20
Mobil	3,400	NA	0	3,458	13
Eastman Kodak	879	4	1	4,511	25
General Motors	5,500	3	0	22,900	45
Archer Daniels Midland	1,279	3[3]	0	29	1
Chevron	1,000[5]	2	0	3,751	26
Johnson & Johnson	829	2[3]	0	700	10

[1] defined benefit
[2] excludes any in-house portfolio managers
[3] all have non-investment duties
[4] one has non-investment duties
[5] domestic
NA: not available
Source: the companies

To our readers:

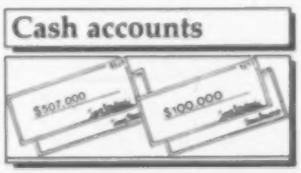
Cash Accounts, a new feature, reports which corporations are buying which cash management services and products — including short-term investment strategies, lockboxes and cash concentration systems and treasury workstations.

By reporting on specific corporations in Cash Accounts, *Pensions & Investment Age* hopes to provide insight on why cash management executives bought a particular service or product and why they chose a certain vendor, whether it is a bank, consulting firm or other cash management service provider.

Reports from corporate executives are welcome on whatever new cash management services or products are being bought and from banks and other service providers on which clients they have signed.

Please call Barry B. Burr at (312) 649-5268 or Chuck Paustian at (312) 649-5378, or write to Mr. Burr at *P&I Age*, 740 N. Rush St., Chicago, Ill. 60611.

Cash accounts



Simmon Communications Inc. taps Mellon on lockbox service

STAMFORD, Conn. — Simmons Communications Inc., a cable television operator, contracted with Mellon Bank Corp., Pittsburgh, to process consumer payments at Mellon's Los Angeles lockbox site.

Smedley D. "Chick" Butler, Simmons' vice president of finance, said Simmons recently bought a cable television system in Long Beach, Calif., its first West Coast operation.

He expects the new lockbox to process about 120,000 receipts a month.

Simmons, a closely held concern, hired Mellon, he said, because "the quality of service is good and the pricing is reasonable." He declined to give any details on pricing.

"We use Mellon in other areas," he added.

Exxon Co. USA

HOUSTON — Exxon Co. USA has developed with the First National Bank of Maryland, Baltimore, an electronic collection service, allowing wholesale customers to initiate and control the payment of invoices.

"Instead of a customer mailing a check to a lockbox, it would place a call to a toll-free number, indicating the invoice number and the amount being paid," said William Murray, senior vice president at the bank. "Many companies have been reluctant to allow suppliers to debit their accounts for payments due."

Continued on page 47

Limits likely on standby letters

Restrictions come as agencies tighten guidelines

By Chuck Paustian

Corporate cash management executives may find it more difficult to obtain standby letters of credit from their banks, and will likely find the price of those letters to have increased.

Banks may be forced to restrict their letter of credit business because federal banking regulatory agencies have proposed guidelines requiring off-balance sheet items be included when determining the bank's capital-to-assets ratio.

Some banks, especially money center banks and regional banks, already are scaling back their efforts and establishing self-imposed limits for issuing standby letters of credit.

Banking officials said those restrictions would lead to tougher standards and higher prices for corporate executives trying to obtain letters of credit.

Standby letters of credit, an irrevocable commitment by a bank to support the payments of its customer, became popular with banks during the early 1980s as a means of increasing fee income.

In general, fees range from 0.5% to 1.5% annually of the guaranteed amount provided by the standby letter of credit.

Raymond P. Gordon, managing director of Bank Valuation Inc., San Francisco, said his firm recently conducted a study of 150 banks comparing the amount of outstanding standby letters of credit to the bank's equity. The study was conducted using data as of Dec. 31.

Mr. Gordon said the study found two banks with ratios of 300% or higher and 12 banks with ratios between 200% and 299%. An additional 29 banks had a ratio between 100% and 199%, he said.

"It seems to me that the banks that are wheeling and dealing with the letters of credit are the big money center banks, or the banks trying to emulate the money center banks," said Mr. Gordon.

The business of issuing standby letters of credit became the center of further attention in a recent U.S. Supreme Court ruling on a case against the Federal Deposit Insurance Corp. filed by Philadelphia Gear Corp., King of Prussia, Pa.

The court ruled 6-3 that a standby letter of credit backed by a promissory note was not the same as a cash deposit. Court documents included a government estimate of almost $120 billion in outstanding standby letters of credit by all banks.

Bank industry experts, including the federal regulatory agencies, have expressed concern over the amount of outstanding standby letters of credit carried by some banks.

"The regulatory authorities are saying there is a limit because their is a liability there," said Mr. Gordon.

The Federal Reserve System has proposed requiring banks to maintain some sort of capital reserve for all off-balance sheet lines of business.

"The proposal does include standby letters of credit in the framework for requiring capital backing. There is no specific amount as yet," said Richard Spillenkothen, assistant director to the board of the Federal Reserve System.

The other regulatory authorities, the FDIC and the office of the comptroller of the currency, also have proposed similar guidelines.

Bank officials agreed the proposed requirements would reduce the availability of standby letters of credit and increase the price.

"It would depend on how tightly the Fed regulates it. Basically everything again is the law of supply and demand," said William Regimbal, senior international operations officer at Provident National Bank, Philadelphia. "(The banks) will be more selective in the granting of their standby letters of credit," he said.

"The banks that impose no limit at all (on their letters) will feel the greatest impact."

Some banks already have begun to reduce the amount of standby letters of credit they issue.

A bank officer of a major West Coast bank, who asked not to be identified, said, "We are still issuing, but on a very selective basis." He added the bank has about $11.5 billion in outstanding standby letters of credit.

Other banks have been following a self-imposed limit on the amount of outstanding letters of credit issued.

Richard Vanderwerf, senior vice president at National City Bank, Cleveland, said the bank has operated under such a limit in anticipation of regulatory requirements.

"A reasonable reserve ought to be established based on your evaluation of the account party on the letter of credit," he said.

"We like to keep, on average, at least a 1% reserve on our loan and standby letter of credit business.

"Our loan-loss experience might indicate that may be high today, but we prefer to be conservative."

National City Bank had between $300 million and $400

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Corporate . . .

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Despite having a portfolio of a "considerable size" — $2.2 billion — Mr. McNelis employs no outside investment firms.

The staff's performance is "very much like the money funds you see in the Donoghue and Weisenberger reports," he said, referring to Donoghue Organization Inc., Holliston, Mass., and Weisenberger Investment Co. Service, Boston, both of which track money market funds.

"We're performing here as well as the top-performing money market funds. As long as we're performing better than the money funds, we will probably still continue to manage our funds internally."

Ford Motor Co., Dearborn, Mich., has three professionals investing some $4 billion in corporate cash, said Brian Morris, manager-portfolio management department.

He contrasts money management with pension management.

"In fixed income, it's what do you think will happen with interest rates," Mr. Morris said. "I think it's a less complex task (than managing equities).

Equity investing "is a rather complex, intense, research (oriented) task," he added. "A lot of corporations take the view that it's a task for outside managers."

Like other treasury executives, Mr. Morris said Ford was adequately staffed to manage its short-term investments internally. He said the staff invests the portfolio in Treasury securities, repurchase agreements and time deposits.

He doubts outside managers could add value in "other than what you call market specialties, such as preferred stocks or adjustable rate preferred stock" strategies.

He said he gets calls occasionally from outside managers.

"They are after a little piece to manage," Mr. Morris said. "They don't want the whole thing. We get a lot of calls from preferred stock and dividend capture managers."

A money manager at Paramount Capital Group Inc., New York, which runs $40 million in taxable corporate cash for nine clients, agrees corporations can adequately manage their short-term investments internally, in less complex strategies.

"Most of the cash managers at corporations I talk with can handle the short-end (investments) more than adequately," said Bryan Scott Ganz, Paramount's chairman.

"Essentially, when you're looking at an investment manager for corporate cash, you are looking for alternative investments, such as dividend capture.

"Needless to say, you don't need an outside manager for overnight repurchase agreements or T-bills."

But for more complex strategies, such as the dividend capture in which Paramount specializes, Mr. Ganz sees corporations looking outside.

While still a short-term investment, he said a dividend strategy requires a longer outlook, at least the 46 days required to hold securities to qualify for special tax treatment.

"I think you're going to see a lot more professional management on the corporate cash side," Mr. Ganz said. "The reason is rates are dropping and people are looking for greater yield."

Sun declined to publicize the names of its two outside managers, although neither is Paramount. Each runs about $100 million in dividend capture strategies.

Mr. Latta said Sun had a third manager, "but we discontinued them. We felt they weren't following our investment guidelines." He declined to give details.

He said Sun hired the managers because, "we are getting into areas we weren't normally familiar with."

But the vast amount of Sun's corporate cash is invested by its own staff.

"I'm not really anxious to pay a money manager a heck of a lot more than we pay our in-house managers and not get a great deal in return," Mr. Latta said.

He cited the company's need for timely reporting. "Investment managers can't give us the investment information in the turnaround time we need it," he said. "Money managers report too slowly.

"I want to see what's going on in some portfolios daily and certainly in all portfolios every month. I'm not willing to wait 45 or 60 days for a money manager to generate a report, and to pay for it."

AT&T isn't considering dividend strategies, Mr. McNelis said, because of its tax position. "AT&T has accumulated tax credits," he said, to offset income.

He said AT&T's investment policy allows only trading in taxable fixed-income instruments, such as certificates of deposit, bankers' acceptances, repurchase agreements and commercial paper, and ranks safety of principal and liquidity high.

"The investment policy is reviewed every six months," Mr. McNelis said. The next review is in July.

He said AT&T's portfolio staff is "very cost efficient with two people managing it, as you can imagine. Very cost efficient." Their relatively narrow choice of investments allows them to perform adequately managing a large sum of money, he added.

At General Motors Corp., New York, a treasury executive explained why the firm runs some $5 billion in cash internally.

"It's important we keep the cash close at hand" for operations, he said. "We need to have that cash close at hand. You can't be pulling it back (from outside managers).

"Most money managers aren't too excited about being called up and being told, 'Hey, I was wrong I need $10 million (to withdraw).'

"Corporations are willing to sacrifice short-term returns for liquidity. Sometimes it's a big price to pay." ■

Plan termination reform debated

WASHINGTON — Despite the new pension reform contained in the 1985 Budget Reconciliation Act, debate continues over the need for further reform for pension plan termination policy, according to the Employee Benefit Research Institute.

Questions remain, about how often and why pension plan overfunding and underfunding occurs, and what effects overfunding may have in a pension plan termination, according to the Washington-based benefits think tank.

Asset reversions from terminations have generated controversy, because some say participants still suffer substantial losses. Others believe participants could face less severe losses if assets were used to help the employer overcome financial troubles, as opposed to losses suffered from layoffs or plant closings.

Although the new law helps to alleviate problems in terminations, more reform is needed. ■

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THERE ARE SOME THINGS EVEN CHANGE WON'T CHANGE.

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Quantitative techniques give firms an edge

By Chuck Paustian

The new generation of investment managers — those who use quantitative tools to pick stocks — is successfully wooing institutional investors away from managers who rely on forecasts and personal insight.

Of the 10 firms identified by investment management consultants and *Pensions & Investment Age* as the up and coming money management firms, seven use quantitative techniques and computer models to perform such tasks as identifying the current stage of a market cycle and/or selecting specific stocks based on previously determined criteria.

The 10 firms were selected based on both external and internal data collected by *P&I Age*.

First, consultants were asked informally to identify young investment management firms perceived to be making a mark in their industry.

In addition, firms were selected based on the growth of assets under management during 1985 as reported in *P&I Age's* annual directory of money managers.

The results confirm the trend toward quantitative techniques,

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Profiles of five firms begin on page 12

UP & COMERS

Pensions & Investment Age

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Zeros sold in merger of 2 plans

By Marci Baker

MORRISTOWN, N.J. — A multimillion-dollar trade of zero-coupon bonds that bypassed the trading floors on Wall Street helped Allied-Signal Corp. officials merge the $1.5 billion Signal Co. pension plan into the $3.5 billion Allied master trust.

Allied negotiated the sale of $360 million of zero-coupon Treasury securities directly with Metropolitan Life Insurance Co., New York, said Edward T. Tokar Jr., vice president-investments. The remaining $1 billion-plus assets in the Signal plan are being liquidated through more traditional trades on Wall Street as market opportunities arise, he said.

Allied and Signal merged early last year.

The bonds in the private trade have a face value of $1.4

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Rates, funded status drop

$200 billion surplus wiped out

By Chuck Paustian

CHICAGO — Falling interest rates have reduced the funded status of private pension plans an estimated $200 billion to $300 billion, and may have placed the pension system in an underfunded position, industry experts said.

Perhaps the most dramatic example is that of United Air Lines Inc., Chicago. A year ago, United officials decided to terminate five plans, but the slump in interest rates prompted them to terminate only three.

The interest rate drop was largely responsible for slashing by about 64% the size of the reversion from the three terminated plans. On Oct. 9, when the PBGC issued its notices of sufficiency, the surplus for the three plans totaled more than $378 million. United ultimately was able to recapture only $136.8 million in excess assets from the same three plans.

(United originally expected to recoup $962 million had it terminated all five plans.)

"The climate got so bad, we decided not to go ahead with recovering surplus assets from the plans for pilots and flight attendants," said Joseph P. Hopkins, corporate communications manager for United.

The problem, said pension observers, is most corporate plan sponsors focus on the growth of plan assets without fully realizing the relationship between interest rates and the current value of accrued liabilities.

Under the current low interest-rate environment, many reversions will be erased, some said.

In addition, falling interest rates put the Pension Benefit Guaranty Corp., Washington, at greater risk as the unfunded portion of plan liabilities increases.

With the exceptions of brief escalations in mid-1984 and early 1985, interest rates have fallen steadily since the beginning of 1984.

Pension actuaries base their actuarial discount rate, used for determining the current value of accrued liabilities, on current long-term inter-

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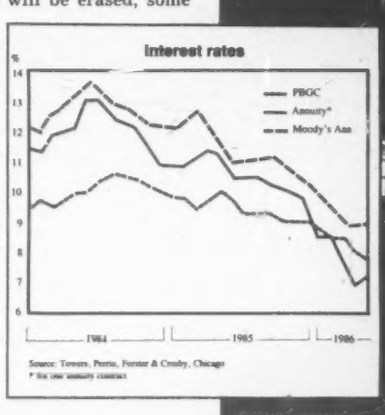

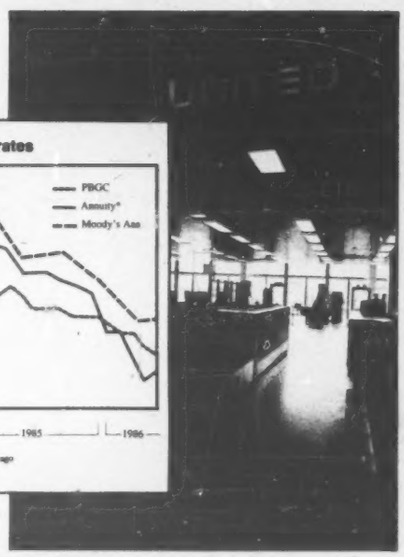

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CASH MANAGEMENT: Today's lower interest rates are causing the cost of a lockbox to supplant the advantage of float in importance when corporate cash managers pick their lockboxing sites — page 33.

FUTURES & OPTIONS: Dynamic hedging is one of the hottest — and most untested investment techniques

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Advisers close open-end funds

Difficult, changing market forces property sell-off

By Steve Hemmerick and Ed Christman

A difficult and changing real estate market is forcing some real estate managers to shut their open-end funds and to sell off or considering selling off portfolios containing at least $400 million in properties.

• Goldman, Sachs & Co., New York will send $100 million in cash contributions back to real estate clients and shut its open-end fund, Institutional Property Assets, to new contributions, officials there said.

Hereafter, Goldman officials said, they will concentrate on megadeals for separate accounts, and sell, when opportune, their fund's $200 million in assets.

• Bank of America Investment Real Estate, San Francisco, is closing its fund, with $80 million in assets, and selling off the properties. The firm will continue its separate account business.

• Crocker Real Estate Investment Group, San Francisco, which froze an open-end fund containing an estimated $90 million in assets last fall, has since terminated the fund.

• Mercantile Trust Co., St. Louis, closed its open-end Mercantile Real Estate Fund "R" late last year and sold off the entire $60 million portfolio. The fund since has been reopened, but will invest only in real estate investment trusts.

• Officials at Connecticut Mutual Life Insurance Co., Hartford, are asking clients if they should close their $27 million open-end fund, CM Properties, and sell off its properties.

Despite the forced sell-off of the properties in the portfolios, real estate prices won't be driven down further, experts say. One reason is the

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Instead of first collecting the money, then looking for deals, Goldman uses its visibility to negotiate major deals first, then looks for investors.
— Claude Ballard
Goldman, Sachs